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BOSE McKINNEY & EVANS LLP
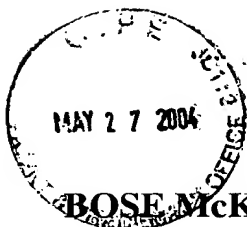
2700 First Indiana Plaza
135 North Pennsylvania Street
Indianapolis, Indiana 46204
(317) 684-5000

PATENT APPLICATION

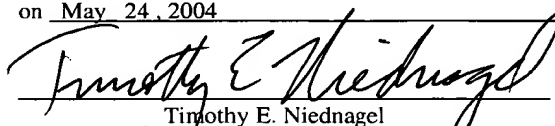### *IN THE UNITED STATES PATENT AND TRADEMARK OFFICE*

Group:	3625	}
		}
Atty. Docket:	10252-0010	}
		}
Applicants:	Hill	}
		}
Invention:	VIRTUAL CATALOG AND	}
	PRODUCT PRESENTATION	}
	METHOD AND APPARATUS	}
		}
Serial No.:	09/406,477	}
		}
Filed:	September 27, 1999	}
		}
Examiner:	Chang, Sabrina A.	}

Certificate of Transmission Under 37 C.F.R. 1.8

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on _May 24, 2004_

_____
Timothy E. Niednagel

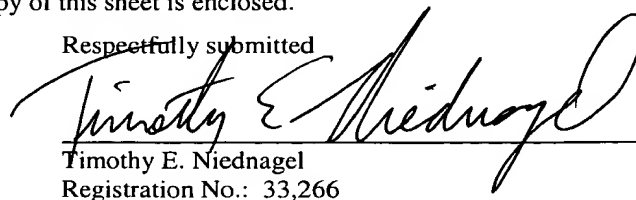_____
Dated

Communication

Mail Stop Amendment
Commissioner of Patents
P.O. Box 1450
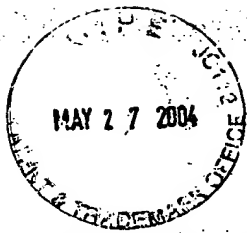Alexandria, VA 22313-1450

Sir:

Applicant submits that a Response to the Office Action dated January 23, 2004 and an accompanying Declaration under Rule 1.131 were filed today in the above-identified application. A copy of the submitted Declaration is enclosed. Submitted with this communication are copies of Exhibit A ("Product Report") and Exhibit B ("Virtual Catalog Report") referred to in the Declaration, but which were inadvertently not sent with the Declaration in the earlier mailing. Consideration of the Declaration along with Exhibit A and Exhibit B are respectfully requested.

Please charge any additional fees due, or credit any overpayment, to Bose McKinney & Evans LLP's Deposit Account No. 02-3223. A duplicate copy of this sheet is enclosed.

Respectfully submitted

_____
Timothy E. Niednagel
Registration No.: 33,266

Indianapolis, Indiana 46204
(317) 684-5281

BOSE McKINNEY & EVANS LLP

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group:	3625	}
Atty. Docket:	10252-0010	}
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on ___May 24 2004_____

Brenda Vandever

Brenda Vandever

___May 24, 2004_____
(Dated)

DECLARATION UNDER 37 C.F.R. 1.131

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Charles E. Hill, hereby declare that:

1. I am the inventor of all of the pending claims of the above-identified application.

2. Prior to October 30, 1995, having earlier conceived of the idea, I had reduced to practice a software package which generally performed the functionality listed in the report entitled A PRODUCT PRESENTATION, SALES PRODUCTIVITY, AND JUST IN TIME INVENTORY INVENTION and its accompanying Figures and Flowcharts ("Product Report"). The Product Report discloses a catalog and presentation software which among other features allows a user to select multiple items from a catalog and review the selected items for a comparison. The Product Report is attached hereto as Exhibit A.

530026v1

3. Prior to October 30, 1995, having earlier conceived of the idea, I had reduced to practice a software package which generally performed the functionality listed in the report entitled A VIRTUAL CATALOG INVENTION ("Virtual Catalog Report"). The Virtual Catalog Report refers to the Figures and Flowcharts of the Product Report and discloses among other features the integration of a product image, a product presentation, and a background image to generate a product presentation image. The Virtual Catalog Report is attached hereto as Exhibit B.

4. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Charles E. Hill

May 21, 2004
Date

A PRODUCT PRESENTATION, SALES PRODUCTIVITY, AND JUST IN TIME INVENTORY INVENTION

Merchandising has a problem that is common to all products. This problem is the inability to determine which categories of any product line will sell well at a particular location. The result is a product that sells well at a location on one side of town may have a poor sales record at a location on the other side of town. Since inventory turnover is the key to profits in retailing, this inability to accurately forecast customer requirements reduces profits.

There are two common solutions applied to eliminate this problem. The first is to build "super stores" to assure product availability by offering a very selection. The second solution is to tailor product availability to a specific store's regular customers and move product in and out of stock rapidly at each location based upon customer demands. Both methods have had some success.

The "super store", by providing a much larger base of product, gives the illusion of providing one stop shopping. It does not optimize inventory.

The second method, typically called vertical or niche merchandising, does a better job of managing inventory while providing those products their regular customers require. It has the disadvantage of making each store layout somewhat unique and product availability between same stores inconsistent.

This invention proposes a solution that combines the best of the above two solutions. Although specifically implemented for the jewelry industry, it is applicable to any industry and is particularly effective where the purchasing decision is based upon visual appreciation of style and color.

When a prospective customer enters a jewelry store, he or she approaches the showcase containing those pieces of specific interest such as engagement rings, earrings, pendants, bracelets or necklaces. The jeweler will then bring a tray of items to the counter where one or more pieces of interest to the prospective customer are placed to the side for further study. The jeweler will continue this process until a few pieces of particular interest have been gathered together.

At this point, the prospective customer's attention is focused on these few pieces and the jeweler can now bring closure to the sale. However, if the prospective customer could find nothing of specific interest, the jeweler could only suggest that he or she look at a competitor's in stock product offering or possibly look through catalogs for something that more closely met his or her requirements.

In this invention, the shortcomings of standard merchandising are overcome by providing an electronic image of the product. Unlike the limitations of physical space and financing that are imposed on in-stock inventory, a video catalog can offer more than an order of magnitude greater number of product selections. It also is a much more efficient and secure method of demonstrating product.

In much the same way physical inventory is demonstrated, the prospective customer is led to a category of product via a hierarchical menu structure. Each piece of interest is selected by picking its menu icon using a mouse or touching the icon if the system utilizes a touch screen monitor. The image of the selected product item and its associated data are then placed into one of four boxes, a sample illustrated in Figure 4. As additional items of interest are found, these may be placed in the remaining four boxes. The limitation of four simultaneous image boxes was chosen as a result of monitor and graphics resolution capabilities. More or fewer image boxes could be used dependent upon the application and the current display technology. When the fifth image is selected, it replaces the first, the sixth replaces the second and continues in an infinite loop.

A unique feature of this invention is the ability to select individual items as they are displayed in the image boxes and move them to a review screen. This allows the customer to browse through multiple categories (trays) and move to a separate review screen (assortment of items of special interest) for later inspection those items that are of special interest. Once a few items of interest, again arbitrarily limited to four, have been moved to the review screen they can then be compared side by side for a quick decision of which to purchase.(See Figure 7)

This enables the jeweler to minimize actual in-stock inventory to only those items required to provide the prospective customer with the look and feel of the quality of similar merchandise. At the same time, the jeweler can offer a very large selection of product and demonstrate it efficiently. This invention therefore improves the efficiency of product presentation, improves sales productivity, and provides a means of implementing just in time inventory for the retail merchandiser.

DESIGN DESCRIPTION OF INVENTION

Flow diagrams on pages 1 thru xx comprise the logic diagrams that describe the system architecture. As with any software system, the first function is to display the logo with its intellectual rights claims and certain option buttons.(See Figure 8) The option buttons for this application are "OK", "EXIT" and "Configure". System configuration is application specific and this invention is not dependent upon how it is implemented. The "EXIT" allows the user to exit the application and return to the operating system. The "OK" button allows the user to continue with the application.

There are several ways to implement a product selection menu. To accomodate a large number of items and to make navigation of the menu intuitive, a hierarchical structure was selected. The following paragraphs describe the architecture and this menu implementation.

First Level

(See Figure 1)

A second level, and specifically that for "Bridal" might consist of the following.

(See Figure 2)

A third level, and specifically that for "Bridal / Bridal Sets" might consist of the following.

(See Figure 3)

Although a hierarchical menu is not limited to three levels, you can generally narrow any product selection criteria down to just a few choices within three levels. Once the final level has been reached, in this case "Channel Sets", an icon style menu is displayed by double clicking on this selection.

A sample of the icon menu presented is shown in Figure 4. This icon menu and following icon menus are the basis for this invention. The jeweler in a store without this invention would be limited to showing a prospective customer a tray of merchandise from inventory (rings, pendants, earrings, bracelets, etc.). If the prospective customer showed interest in a particular piece, the jeweler would remove it from the tray for closer inspection by the customer. If the customer was undecided, the piece would be placed to the side. From the same tray or additional trays, other pieces would be shown and selected and subsequently added to the group of high interest pieces.

The jeweler would then concentrate on closing the sale on these selected pieces from inventory.

This invention as embodied allows the jeweler to follow the same scenario utilizing a video catalog and presentation software. As shown by Sample Main Menu, (Flow Diagram, Page 3), the jeweler would first select one of the primary product menus and in this illustration, Vendor E, Finished Goods (Ref: Flow Diagram, Page 4). This would cause the hierarchical product menu, as previously described and illustrated by Figures 1, 2, and 3, to be displayed.

In addition to the product hierachical menu described earlier, there could be option buttons for "Order", "Review", and "EXIT" available and explained later.

Ref: Flow Diagrams, Page 9

Once a selection has been made for a specific product category, as explained earlier, a menu consisting of a product icon scroll box and four display boxes will be presented.(See Figure 4) By selecting one of the products in the icon scroll box, the image and associated data for that product is displayed in the next available display box. After four products have been selected and these products are displayed, the next selection will replace the first. This is a continuous loop allowing the user to always display four products simultaneously.

At any time, the user could select any one of the four display windows. This action will cause a review/order box to be displayed (Ref: Flow Diagram, Page 10 and Figure 5). If the review button within this box is selected, the product image and data are copied to the first available display box on the review screen. This allows the user to collect product images and data from one or more product categories. These products may then be compared side by side at any time by picking the review button on the hierarchical menu display (Ref: Flow Diagram, Page 5 and Figures 1 and 7). The review/order box is then exited and the user is returned to the previous screen.

By selecting the order button, the product is automatically appended to the order pad.(See Figure 6) The user is then returned to the previous screen. Selecting the cancel button will also return the user to the previous screen with no other functions having been performed.

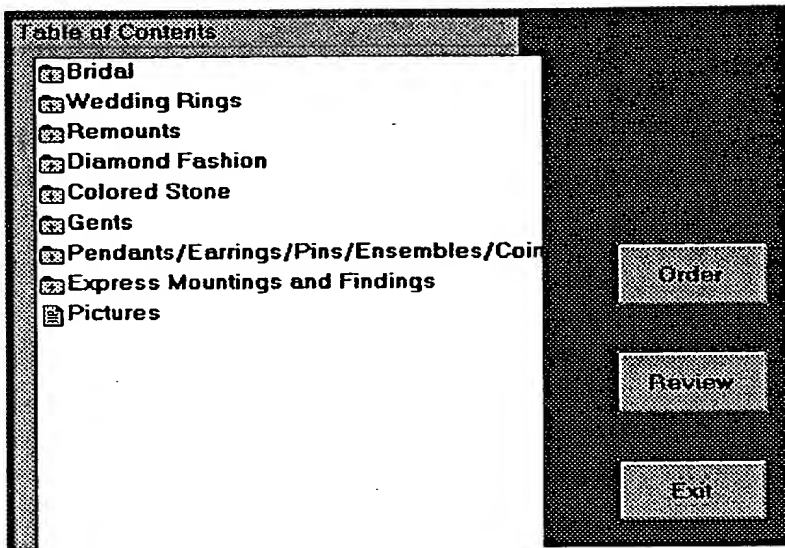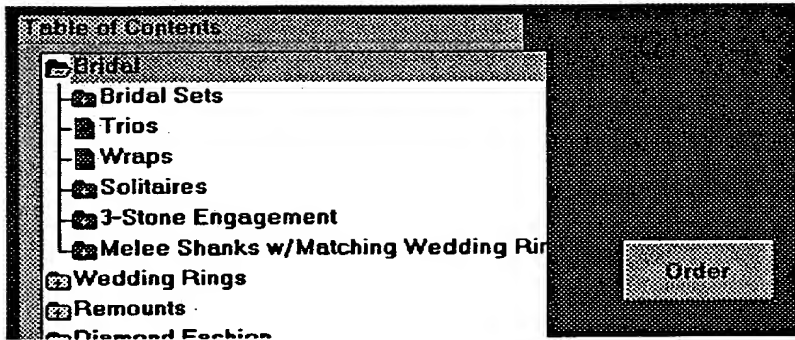**Table of Contents**
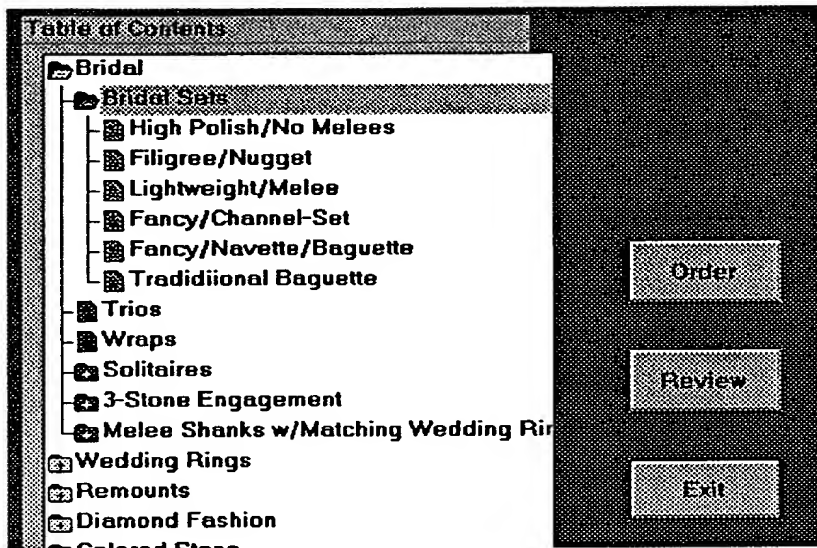
- Bridal
- Wedding Rings
- Remounts
- Diamond Fashion
- Colored Stone
- Gents
- Pendants/Earrings/Pins/Ensembles/Coin
- Express Mountings and Findings
- Pictures

Order

Review

Exit

Figure 1

Table of Contents

Order

Figure 2

Table of Contents

- Bridal
  - **Bridal Sets**
    - High Polish/No Melees
    - Filigree/Nugget
    - Lightweight/Melee
    - Fancy/Channel-Set
    - Fancy/Navette/Baguette
    - Tradidiional Baguette
  - Trios
  - Wraps
  - Solitaires
  - 3-Stone Engagement
  - Melee Shanks w/Matching Wedding Rir
- Wedding Rings
- Remounts
- Diamond Fashion
- Colored Ston

Order

Review

Exit

Figure 3

Items

- 34-215MS
- 35-487MS
- 35-239MS-1
- 34-339MS
- 34-339MS
- 35-239MS
- 35-639MS
- 35-834MS

Exit ? Help

35-487MS
2.60 DWT

Style: 35-487MS
DWT: 2.600
(4-.05,2-.10,2-.08)

34-339MS
2.10 DWT

Style: 34-339MS
DWT: 2.100
(8-.025)

34-339MS
2.10 DWT

Style: 34-339MS
DWT: 2.100
(8-.025)

Style: 35-639MS
DWT: 5.550
(18-.02)

Figure 4

Item Specifics for MOUNTINGS

Quantity: 1
Metal: 14K
Color: Y

Order   Review   Cancel   Help

Style: 35-487MS
DWT: 2.600
(4-.05,2-.10,2-.08)

Figure 5

Qty.	Style Number	Description	Metal	Color
1	35-779-1CT		14K	Y
1	35-487W		14K	Y
1	35-487MS		14K	Y

Order Pad

[Exit]   [Order]   [Inquire]   [? Help]

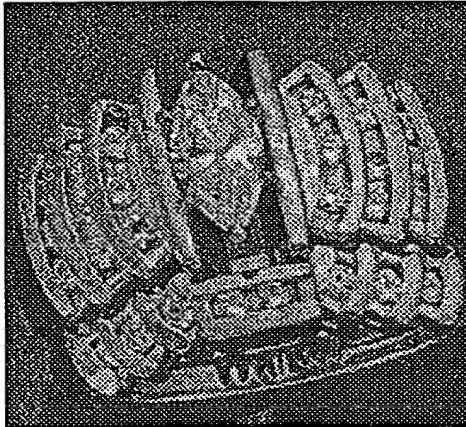Figure 6

35-487W

35-487MS

35-639W

35-487MS

33-982

35-487MS

5368W

35-487MS
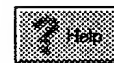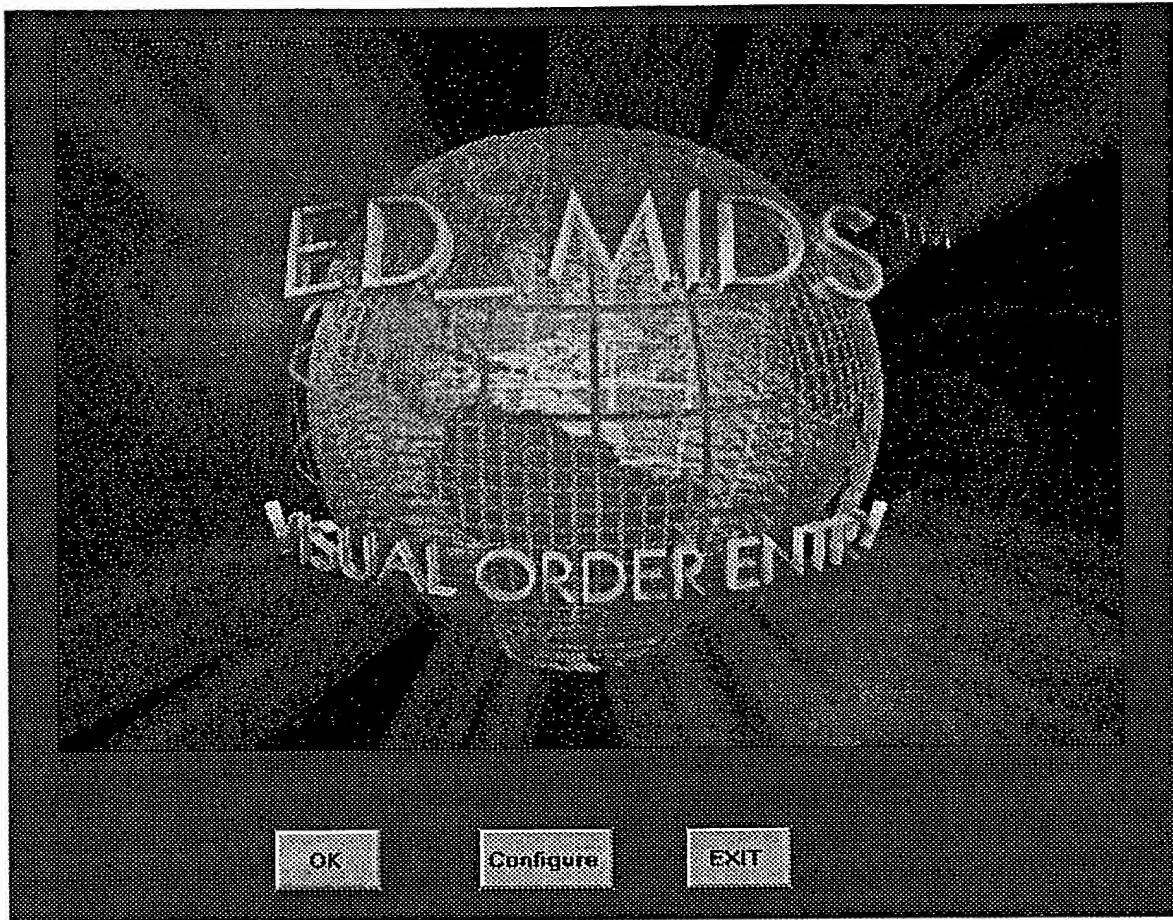
Cancel

Help

Figure 7

ED AIDS™
VISUAL ORDER ENTRY™

OK   Configure   EXIT

Figure 8

~1

ED-MIDS
WINDOWS ICON
SELECTED

From Page 2 (B)
From Page 4 (C) → (A)

LOGO DISPLAYED
WITH
OK, EXIT and
CONFIGURATION BUTTONS

EXIT
SELECTED — YES

NO

CONFIGURATION
SELECTED — YES — (B) To Page 2, (A)

NO

OK
SELECTED
NO ←

From Page 6 (B)
(D) → YES

MAIN
MENU
DISPLAYED
SEE EXAMPLE (Page 3)

(C)
TO
Page 4 (A)

c 2

CONFIGURATION SCREEN

(A) FROM Page 1, (B)

```
┌──────────────────────────┐
│  SERVICE                 │
│  MOUSE PICKS             │
│       and                │
│  KEYBOARD ENTRIES        │
│  for SCREEN FIELDS       │
└──────────────────────────┘
```

CANCEL SELECTED OR ESCAPE KEY — YES → (B) To Page 1, (A)

NO

OK SELECTED

NO

YES

```
┌──────────────────────────┐
│  WRITE NEW               │
│  CONFIGURATION           │
│       FILE               │
└──────────────────────────┘
```

(C)
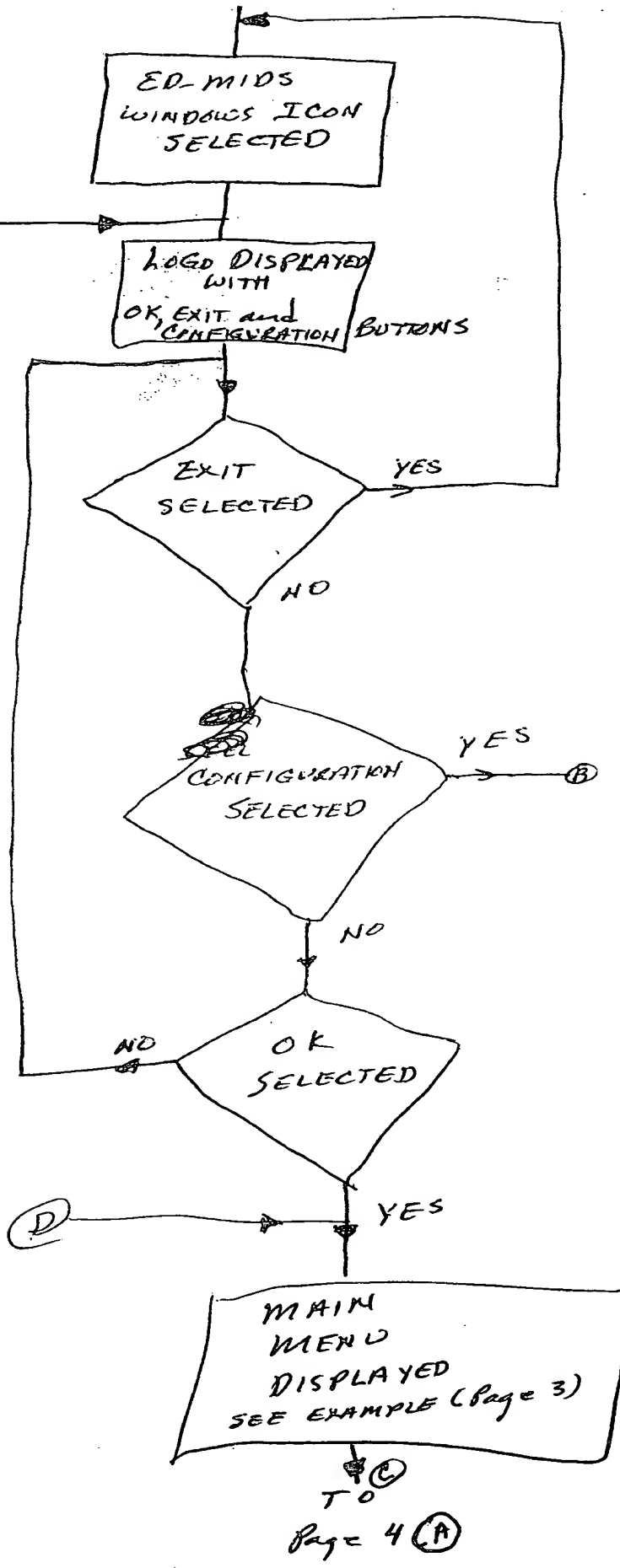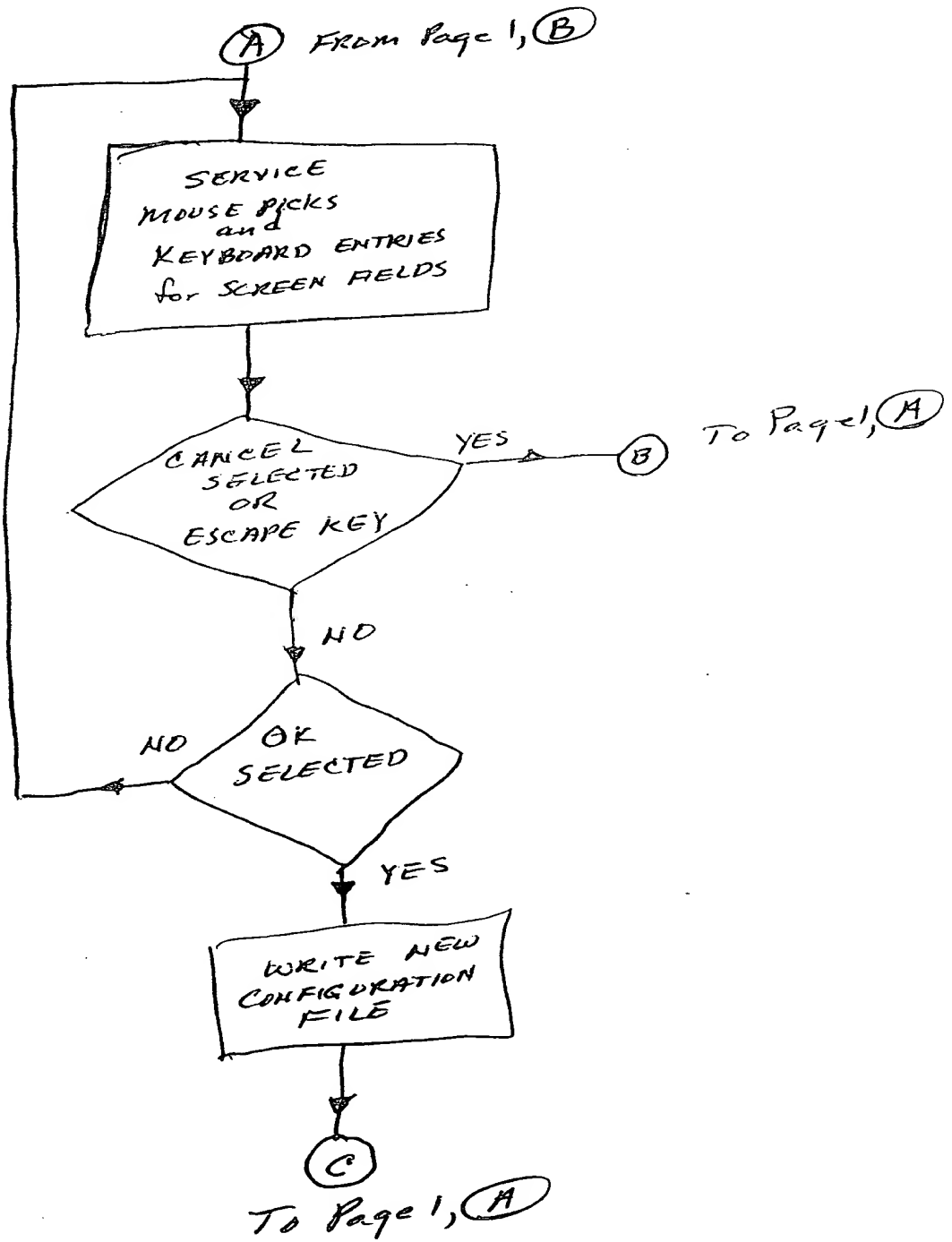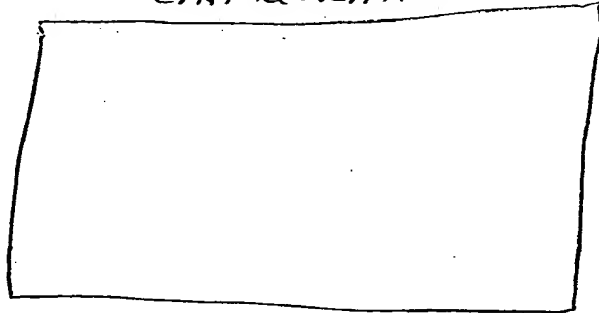
To Page 1, (A)

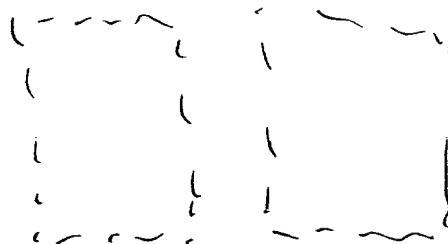VENDOR E
FINISHED GOODS

VENDOR D
GEMSTONES

VENDOR C
DIAMONDS

VENDOR B
FINDINGS

VENDOR A
MOUNTINGS

EXIT

FROM Page 1, Ⓒ

EXIT SELECTED

YES → To Page 1, Ⓐ
Ⓒ

NO

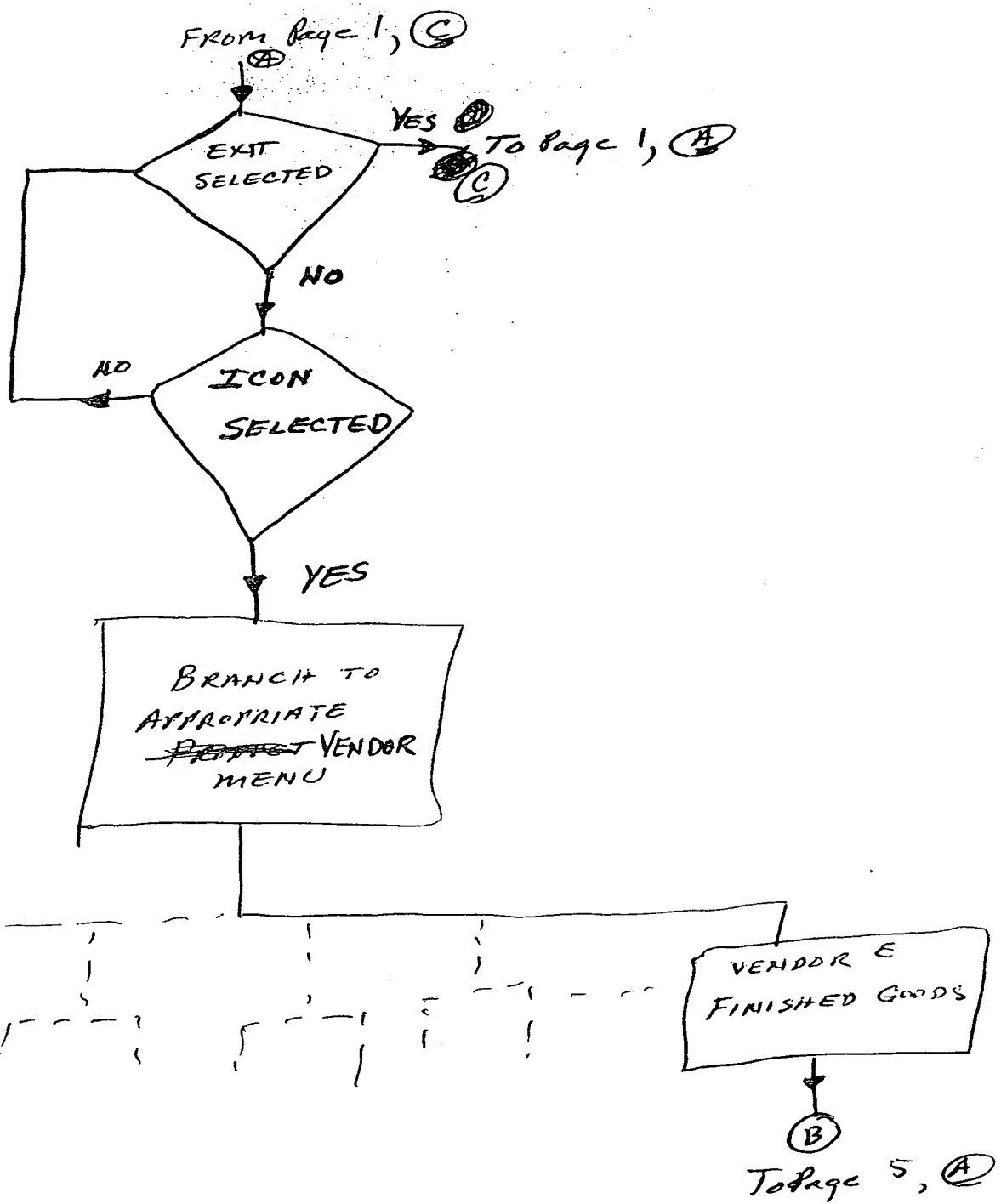ICON SELECTED

NO

YES

BRANCH TO APPROPRIATE ~~PROJECT~~ VENDOR MENU

VENDOR E FINISHED GOODS

Ⓑ

To Page 5, Ⓐ

FROM PAGE 4 (B)

(A)

DISPLAY HIERARCHIAL
PRODUCT MENU
AND BUTTONS FOR
ORDER, REVIEW and EXIT

(B)

TO Page 6 (A)

SAMPLE HIERARCHIAL
PRODUCT MENU

See Figures 1, 2 and 3

From Page 5 (B)

(A)

EXIT SELECTED — YES → (B) To Page 1, (D)

NO

ORDER SELECTED — YES → (C) To Page 7, (A)

Add Item to Order Pad

NO

REVIEW SELECTED — YES → (D) To Page 8, (A)

Product Item Selected

NO

NO

Product Category Icon Selected
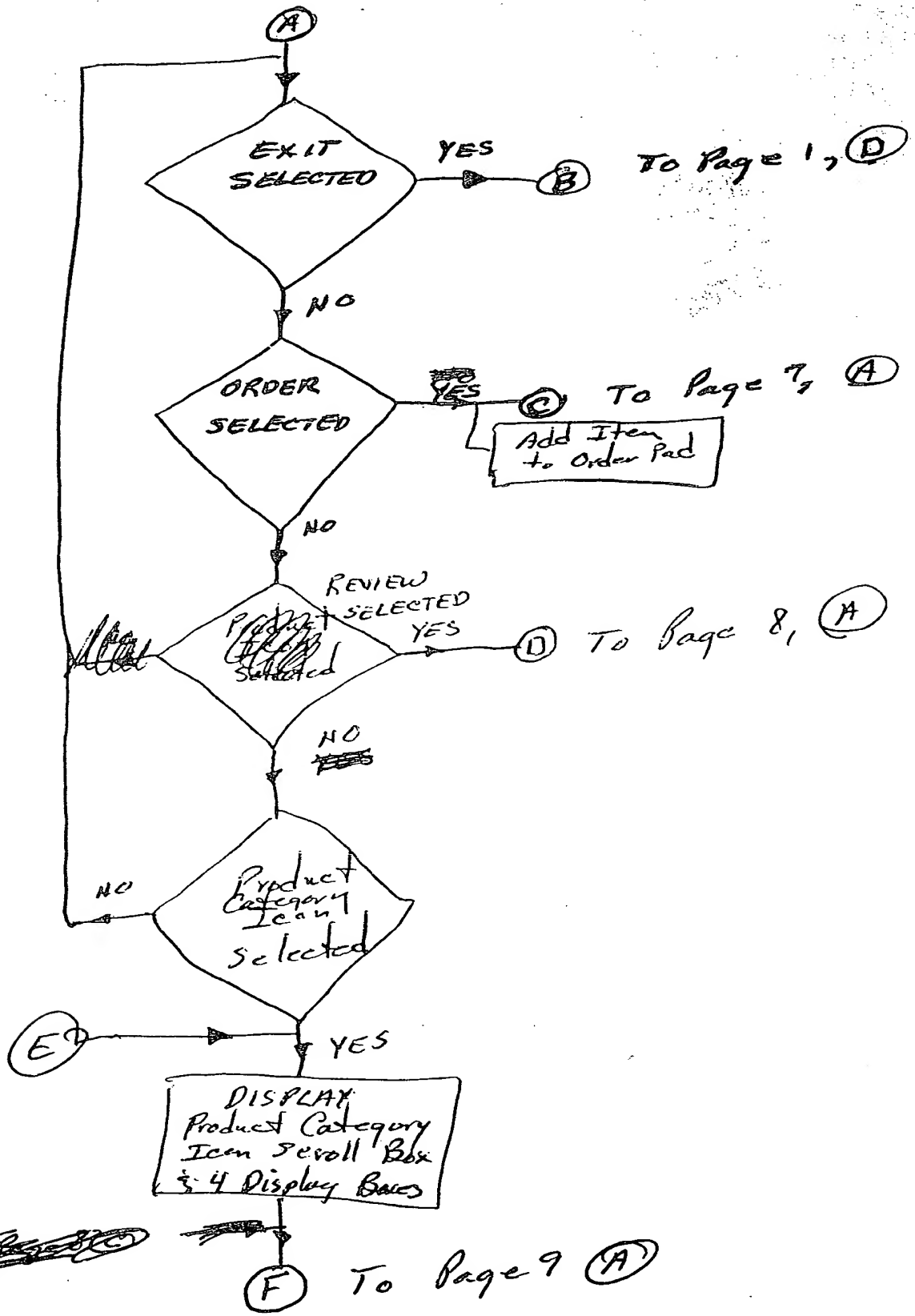
From Page 8 (C)
From Page 10 (B)
From Page 10 (C)

(E) — → YES

DISPLAY
Product Category
Icon Scroll Box
& 4 Display Boxes

(F) To Page 9 (A)

SAMPLE ORDER PAD

See Figure 6

From Page 6 (C) or Page 8 (B)

(A)

LINE SELECTED FOR MODIFICATION OR DELETION

YES → DISPLAY FIELDS FOR MODIFICATION

NO

Cancel Selected

NO

YES → (D)

To Page 5 (A)

DELETE LINE SELECTED

YES → DELETE LINE FROM ORDER FILE → (B) To Page 5 (A)

NO

OK SELECTED

NO

YES → (C) To Page 5 (A)

From Page 6 (D)

(A)

DISPLAY
REVIEW
SCREEN

ANY 1 of 4
DISPLAYS
SELECTED

YES → (B) To Page 7 (A)

ADD ITEM TO
ORDER PAD

NO

Cancel
Selected

NO

YES

(E) To Page 6 (E)

FROM PAGE 6 (F)

(A)

EXIT SELECTED ──YES──► (B) Go to Page 5 (A)

│ NO

SCROLL SELECTED ──YES──► [SCROLL ICONS]

│ NO

DISPLAY WINDOW (1 of 4) SELECTED ──YES──► (C) Go to Page 10 (A)

│ NO

ICON SELECTED FROM SCROLL BOX ──NO──►

│

READ PRODUCT "MAP" TO DETERMINE IMAGE(S), DATA & CONFIGURATION FOR INTEGRATION

RETRIEVE PRODUCT IMAGE(S) & DATA

DISPLAY PRODUCT IMAGE(S) & DATA PER "MAP" CONFIGURATION IN NEXT AVAILABLE DISPLAY WINDOW (1 of 4)

VIRTUAL CATALOG INVENTIO...

From Page 9 Ⓒ

Ⓐ

DISPLAY
REVIEW/ORDER
BOX

REVIEW SELECTED — YES → ADD IMAGE and DATA TO NEXT AVAILABLE REVIEW BOX → Ⓑ To Page 4 Ⓔ

NO

ORDER SELECTED — YES → ADD ITEM TO ORDER PAD → Ⓒ To Page 4 Ⓔ

NO

CANCEL SELECTED — NO
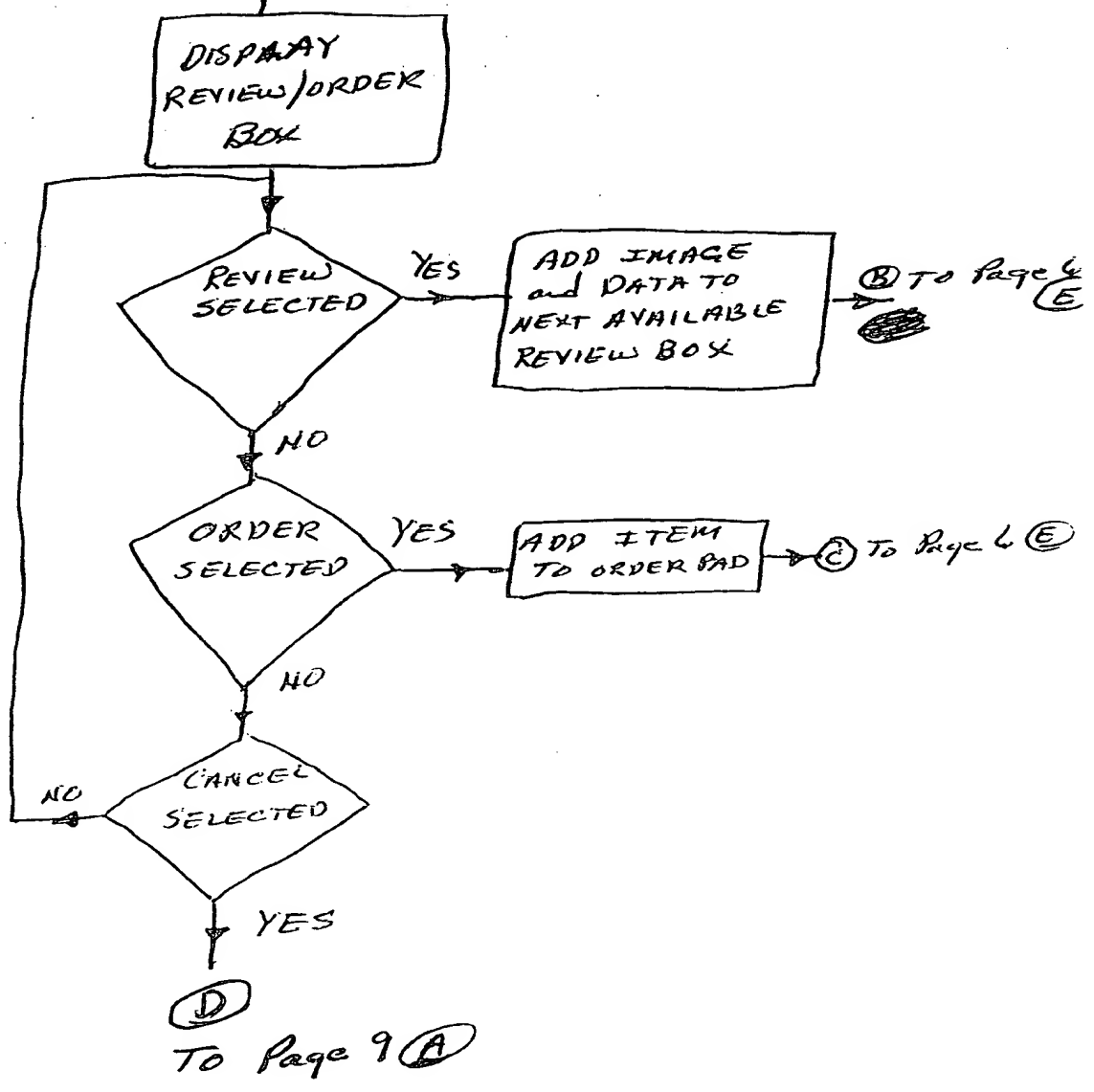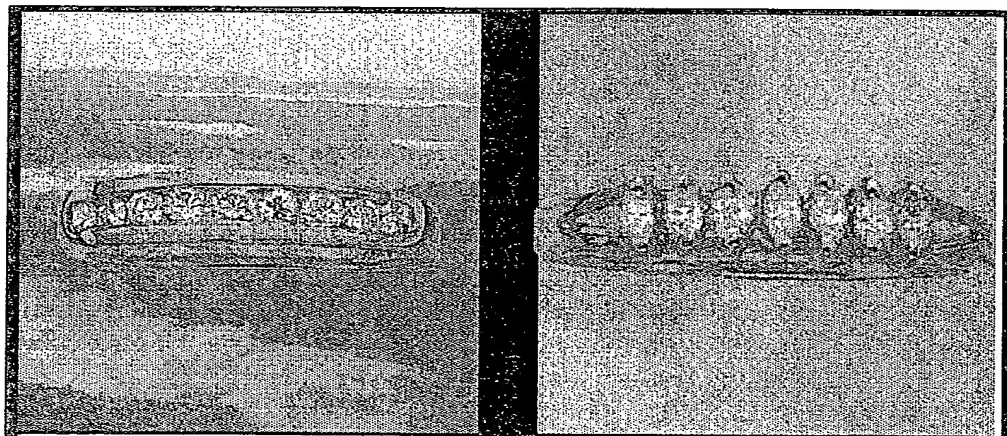
YES

Ⓓ
To Page 9 Ⓐ

A VIRTUAL CATALOG INVENTION

Today in merchandising, special days are used to help generate interest in product.
We have Father's Day, Mother's Day, Thanksgiving, the day after Thanksgiving,
and so on. When advertising products for these special days, the merchandiser
typically generates a flyer with pictures of the merchandise on a background
illustrating the event.

This invention provides the capability of dynamically applying a background to the
image of a product. This allows a scene depicting Christmas to be dynamically
applied to the background of those pieces of jewelry that the retailer wishes to offer
as a Christmas special. In fact, it would be practical to apply backgrounds for every
day of the year to selected pieces of merchandise. This allows the merchandiser to
effectively have a virtual catalog where both the product selection and presentation
can change on demand.

Further enhancements of the invention utililize the concepts and claims of
invention #x,xxx,xxx. In this invention, the techniques for integrating and
maintaining static and variable data are disclosed. Using the concept of a "map" to
define the exact way a product image, product information and background image
are to be integrated, a product presentation image can be generated. In addition,
all components of the presentation image can be managed and maintained by a
central server. This allows corporate marketing and advertising to efficiently
control and manage product presentation at each sales location.

The following pictures of screens illustrates how products can be presented on
multiple backgrounds.

DESIGN DESCRIPTION OF INVENTION

Flow diagrams on pages 1 thru xx comprise the logic diagrams that describe the system architecture. As with any software system, the first function is to display the logo with its intellectual rights claims and certain option buttons.(See Figure 8) The option buttons for this application are "OK", "EXIT" and "Configure". System configuration is application specific and this invention is not dependent upon how it is implemented. The "EXIT" allows the user to exit the application and return to the operating system. The "OK" button allows the user to continue with the application.

There are several ways to implement a product selection menu. To accomodate a large number of items and to make navigation of the menu intuitive, a hierarchical structure was selected. The following paragraphs describe the architecture and this menu implementation.

First Level

(See Figure 1)
A second level, and specifically that for "Bridal" might consist of the following.

(See Figure 2)

A third level, and specifically that for "Bridal / Bridal Sets" might consist of the following.

(See Figure 3)

Although a hierarchical menu is not limited to three levels, you can generally narrow any product selection criteria down to just a few choices within three levels. Once the final level has been reached, in this case "Channel Sets", an icon style menu is displayed by double clicking on this selection.

A sample of the icon menu presented is shown in Figure 4. This icon menu and following icon menus are the basis for this invention. The jeweler in a store without this invention would be limited to showing a prospective customer a tray of merchandise from inventory (rings, pendants, earrings, bracelets, etc.). If the prospective customer showed interest in a particular piece, the jeweler would remove it from the tray for closer inspection by the customer. If the customer was undecided, the piece would be placed to the side. From the same tray or additional trays, other pieces would be shown and selected and subsequently added to the group of high interest pieces.

The jeweler would then concentrate on closing the sale on these selected pieces from inventory.

This invention as embodied allows the jeweler to follow the same scenario utilizing a video catalog and presentation software. As shown by Sample Main Menu, (Flow Diagram, Page 3), the jeweler would first select one of the primary product menus

and in this illustration, Vendor E, Finished Goods (Ref: Flow Diagram, Page 4). This would cause the hierarchical product menu, as previously described and illustrated by Figures 1, 2, and 3, to be displayed.

In addition to the product hierachical menu described earlier, there could be option buttons for "Order", "Review", and "EXIT" available and explained later.

Ref: Flow Diagrams, Page 9

Once a selection has been made for a specific product category, as explained earlier, a menu consisting of a product icon scroll box and four display boxes will be presented.(See Figure 4) ----- This is the begining of the invention description. ----- By selecting one of the products in the icon scroll box, the "map" database is accessed and the record for that product is read. The data within this "map" record points to the product image(s), any additional data, and the configuration to use to integrate the image(s) and data. This is illustrated by the above images of two products each displayed on separate backgrounds. ----- This is the end of the invention description. ----- The image(s) and associated data for that product is displayed in the next available display box. After four products have been selected and these products are displayed, the next selection will replace the first. This is a continuous loop allowing the user to always display four products simultaneously.

At any time, the user could select any one of the four display windows. This action will cause a review/order box to be displayed (Ref: Flow Diagram, Page 10 and Figure 5). If the review button within this box is selected, the product image and data are copied to the first available display box on the review screen. This allows the user to collect product images and data from one or more product categories. These products may then be compared side by side at any time by picking the review button on the hierarchical menu display (Ref: Flow Diagram, Page 5 and Figures 1 and 7). The review/order box is then exited and the user is returned to the previous screen.

By selecting the order button, the product is automatically appended to the order pad.(See Figure 6) The user is then returned to the previous screen. Selecting the cancel button will also return the user to the previous screen with no other functions having been performed.